# CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

# FOR DOMESTIC EQUITY INDEX FUND – INTERNALLY MANAGED

### February 14, 2005

This Policy is effective immediately upon adoption, and supersedes all previous domestic equity index fund - internally managed investment policies.

#### I. PURPOSE

This document sets forth the investment policy ("the Policy") for the Domestic Equity Index Fund - Internally Managed ("the Fund" or "the Portfolio"). Throughout this Policy, Fund and Portfolio are used interchangeably. The design of this Policy ensures that the investors, managers, consultants, or other participants selected by the California Public Employees' Retirement System ("the System") take prudent and careful action while managing the fund. Additionally, use of this Policy provides assurance that there is sufficient flexibility in controlling risks and capturing returns associated with this segment of investments.

### II. STRATEGIC OBJECTIVE

Obtaining broad domestic equity market exposure achieved by closely tracking the designated benchmark index is the strategic objective of the Fund.

The Fund shall be managed to accomplish the following:

- 1. Enhance the System's total return;
- 2. Hedge against active (pre-retirement) liabilities;
- 3. Provide diversification to the System's overall investment program and:
- 4. Consider solely the interest of the System's participants and their beneficiaries in accordance with California State Law.

#### III. RESPONSIBILITIES AND DELEGATIONS

A. The **System's Investment Committee** ("the Investment Committee") is responsible for approving and amending the Policy. The Investment Committee delegates the responsibility for

Copyright © 2005 by CalPERS. Reproduction of any part of this manual is permissible if reproduction contains notice of CalPERS' copyright as follows: "Copyright © 2005 by CalPERS".

administering the Fund portion of the System to the Investment Staff through the Delegation of Authority (Delegation No. 89-13 and 95-50).

- B. The CalPERS Investment Staff ("the Staff") duties include, but are not limited to, the following:
  - 1. Developing and recommending the Policy to the CalPERS Investment Committee;
  - 2. Maintaining a procedures manual, which is subject to periodic review and updates, outlining Staff operational procedures used in implementing this Policy;
  - 3. Implementing and adhering to the Policy;
  - 4. Reporting immediately to the Investment Committee all violations of the Policy with explanations and recommendations;
  - 5. Purchasing only securities that are outlined in this Policy; and
  - 6. Reporting internally to senior management on the implementation of this Policy. This report will be prepared monthly to include, but is not limited to the following:
    - a. Current market value of the portfolio;
    - b. Performance of the portfolio versus the benchmark as reported by the master custodian; and
    - c. Performance attribution analysis which accredits return to its causes.
- C. **The General Pension Consultant** ("General Pension Consultant") is responsible for monitoring, evaluating, and reporting to the Investment Committee, at least quarterly, the performance relative to the benchmark and policy guidelines. The General Pension Consultant is responsible for reporting non-compliance issues with its contract with the System.

Monitoring shall include placing the Fund on Watchlist Status using the following criteria:

Watchlist Status: If the realized annual return deviation is less than -70 basis points for two consecutive quarters, and the forecasted

tracking error is greater than 50 basis points, then the Portfolio will be eligible for watchlist.

#### IV. PERFORMANCE OBJECTIVE

Achieving the return for the broad domestic equity market is the performance objective of the Fund. To accomplish this objective, using statistical models to approximate the return of the market, rather than replicate, is more cost effective.

Return deviations between the Portfolio and the designated benchmark will be random, as expected. To account for the difference in the methodology for calculating the returns of the benchmark and the Portfolio, the resulting return deviation may require an adjustment. The System shall set parameters in the statistical models it employs in such a manner that forecasted tracking error shall be within  $\pm\,50$  basis points and that realized returns should fall no more than 50 basis points below the benchmark over any 12 month period. However, the System shall allow wider tracking error and return deviation when they result from a deliberate decision to reduce turnover or to control a specified risk contained in the Portfolio.

#### V. INVESTMENT APPROACHES AND PARAMETERS

## A. Investment Approaches

Investors, managers, consultants, or other participants selected by the System shall passively manage the portfolio. The construction of the Portfolio shall achieve the stated performance objective. An Optimized sampled approach shall be used to generate an actual portfolio with risk characteristics closely resembling the benchmark. A portfolio created with fewer stocks than the benchmark will avoid large transaction costs.

The optimization approach shall employ a fundamental risk model to define and decompose the Portfolio's risk exposures versus those of the benchmark. Fundamental risk models measure stock returns associated with industry and other fundamental factors such as price/earnings (P/E), yield, and market capitalization. Such fundamental factors are referred to often as "common" factors.

A common factor is an element of return that influences many securities and, hence, is a "common factor" in the returns on those securities. Based on the current Portfolio's exposure to industry and common factors, the volatility of returns can be measured. The information about volatility produced by a fundamental risk model can be used to evaluate portfolio risk, decompose portfolio risk

according to common factor exposures, and evaluate how much of a portfolio's return in a given period was due to each common factor exposure and how much was due to stock selection.

# B. Tracking

Maintaining a portfolio's risk characteristics in line with the benchmark can minimize return deviation. A stock market index is a purely mathematical construction. Its performance will inevitably be different from that of any actual portfolio. This is generally because indices are constructed in mathematically sound ways that can never, in practice, be replicated. The following list highlights technical reasons why a portfolio will not perfectly track a benchmark index:

- 1. The index is fully invested at all times. An actual portfolio will inevitably carry minimal cash equivalents.
- Transaction costs are incurred while investing cash flow, rebalancing the index fund exposure to meet asset allocation requirements, meeting index reconstitution and income reinvestment requirements.
- 3. Dividends are treated in an unrealistic way. The index assumes the dividend becomes available as soon as a stock goes ex-dividend and, thus, earns the equity rate of return. The dividend may not actually be received into the portfolio for several weeks.
- 4. The System's custodian calculates performance using a monthly internal rate of return methodology, while the methodology used for the benchmark index is time weighted (linked daily).
- 5. The annual reconstitution of the benchmark index causes turnover in the benchmark, but no transaction costs are incurred by the benchmark index. In order to minimize transaction costs in the portfolio, the transition to the reconstituted benchmark will be done gradually rather than in one day. Some securities which are deleted from the benchmark are retained in the portfolio because they generate little or no return deviation.

Because the portfolio must incur transaction costs to purchase and sell securities, a trade-off must be made between incurring transaction costs and minimizing return deviation. Since transaction costs are always negative and will reduce the value of the portfolio, while return deviation

Copyright © 2005 by CalPERS. Reproduction of any part of this manual is permissible if reproduction contains notice of CalPERS' copyright as follows: "Copyright © 2005 by CalPERS".

can be positive or negative, consideration will be given to accepting greater return deviation.

6. There is a time lag between when the benchmark is reconstituted annually and when the System receives the updated constituent information.

## C. Specific Risk Parameters

Specific risk parameters shall limit the return deviation of the portfolio versus the benchmark. A number of models shall ensure that the risk parameters are within an acceptable tolerance level to achieve the performance objective. Since the System shall add or eliminate models, the specific risk parameters for each model are detailed in the Procedures Manual.

#### D. Restrictions

- 1. Foreign incorporated securities (including ADR's) shall not be held in the Portfolio for investment. Such securities received in corporate actions or through a change in classification shall be liquidated as cost effective as possible.
- 2. The Fund is prohibited from purchasing shares of Real Estate Investment Trusts (REITs).
- 3. Individual security positions are limited to no more than 5% of the outstanding shares for the security. The System may maintain security positions that exceed this limit if a cost/benefit analysis of holding versus selling the position demonstrates an adverse effect on the tracking goals. However, individual security positions shall be limited to 10% of the outstanding shares. To comply with the limit, securities exceeding the limit shall be liquidated.
- 4. The Portfolio may not purchase the securities of primary tobacco companies as identified by the Investor Responsibility Research Center Tobacco Company List.

#### E. Permissible Securities

- 1. Equity securities of publicly traded companies headquartered in the U.S.
- 2. The Portfolio may hold securities not represented in the designated benchmark. Generally, these holdings in aggregate shall be limited to less than 3% of the Portfolio's

total market value. Such holdings are justified by the following reasons:

- Liquidity constraints or excessive transaction costs, such as those required to sell certain securities obtained from corporate actions or from past benchmark reconstitutions; and
- b) Expectation of inclusion in the benchmark at the next annual reconstitution.

# F. Corporate Actions

Corporate actions (e.g., tender offers, mergers, Dutch-auctions, or spin-offs) shall be handled on a case-by-case basis, with issues requiring in-depth analysis being referred to the Research Unit. Spin-offs will be added to the benchmark if the new security's equity capitalization exceeds \$500 million on the date the security spun-off; otherwise, the security may be a candidate for inclusion in the annual reconstitution.

Companies which offer discount Dividend Reinvestment Programs (DRIP) will be analyzed to determine if return enhancement can be added by participating in such programs.

# G. Rebalancing and Trading Activity

The decision to rebalance the Portfolio is primarily based upon analysis of the monthly risk and performance attribution reports. Portfolio rebalancings shall be performed as necessary to maintain the Portfolio's risk characteristics parallel with those of the benchmark. At a minimum, the Portfolio shall be reviewed annually at the reconstitution. The Risk Model Optimizer will be used to affect the rebalancings. The normal objective function of the optimization is to reduce systematic and nonsystematic risk of the portfolio while minimizing transaction costs.

A variety of trading techniques and liquidity sources shall be utilized to obtain best execution of the approved internal trade list.

Transaction cost analysis shall be performed and evaluated on a quarterly basis for monitoring trading efficiency as compared to that of a like universe. An outside vendor may prepare this analysis.

## H. Attribution Analyses

## 1. Performance Attribution Report

A performance attribution report concerning the Fund shall be generated monthly to ascribe performance to common factors, economic or industry sectors, and stock selection. Returns shall be analyzed to determine where performance is derived and if any appropriate adjustments should be made to the Portfolio.

## 2. Risk Attribution Summary

A risk attribution report shall be generated monthly displaying the total, systematic, and non-systematic risk of the Portfolio relative to the benchmark. Risk characteristics of the Portfolio relative to that of the benchmark can be analyzed to determine if any imbalances exist and if appropriate adjustments should be made to the Portfolio.

## 3. Bias Performance Report

A bias performance report shall be generated within the month to display the Portfolio's performance versus that of the benchmark month-to-date. This report shall show how each economic or industry sector of the Portfolio is performing relative to that of the benchmark. The report shall also show how each stock within the Portfolio is performing relative to the stock's weighting within the benchmark.

## 4. Over/Under Weighting Report

An over/under weight report shall be generated monthly displaying stocks with weights five basis points or greater than the benchmark weight. These stocks shall be screened and evaluated for possible action to decrease/or increase the security's weight in the Portfolio towards the benchmark weight.

#### VI. BENCHMARK

The benchmark for the Fund shall be entitled the "CalPERS Custom Wilshire 2500 Index ("the Benchmark"). This custom benchmark shall be constructed and maintained by Wilshire Associates. It shall be defined as the top 2500 securities of the Wilshire 5000 (excluding REITs and tobacco stocks) with dividends reinvested, and be based on market capitalization and annual reconstitution. Its composition shall provide broad market

exposure to the total U.S. equity market while minimizing transaction costs.

## VII. GENERAL

- A. Terms in this policy are defined in a master glossary of terms.
- B. Investors, managers, consultants, or other participants selected by the system shall make all calculations and computations on a market value basis as recorded by the System's Custodian.

### VIII. DERIVATIVES AND LEVERAGE POLICY

## A. Strategies

The Fund may utilize financial futures, swaps, and options in the Portfolio for the following purposes:

- 1. Permitting the investment of dividends received;
- Equitizing cash and dividends receivable;
- 3. Allowing adjustment of the portfolio's risk characteristics in the most cost effective manner available;
- 4. Facilitating investment of cash flows related to contributions, withdrawals, or asset allocation compliance.

#### B. Justification

Justification for the above mentioned strategies includes the following:

- Comparing lower transaction costs with the purchase of underlying securities;
- 2. Correlating to price movement of benchmark index; and
- 3. Providing the ability to alter risk characteristics versus the benchmark without disrupting the underlying portfolio or unnecessarily increasing turnover.

#### C. Restrictions

Restrictions on the above mentioned strategies include the following:

- 1. Writing uncovered calls is prohibited;
- 2. Leveraging is prohibited. The use of futures contracts as specified in this Policy will not constitute leverage;
- 3. Trading non-exchange traded derivatives is prohibited;
- 4. Speculating is prohibited; and
- 5. Authorizing trade of S&P 500 stock index futures to 1000 long contracts and 1000 short contracts, without prior written authorization from management, is limited.

#### D. Permissible Derivatives

Derivatives utilized in the index portfolio may include, but are not limited to the following:

- 1. Index futures
- Style futures
- 3. Index options
- 4. Equity swaps

### E. Futures Commission Merchants (FCM)

Future Commission Merchants are selected with the following broad range of criteria:

- 1. Low cost clearing and executing charges;
- 2. Securely capitalized firm;
- Clear account statements and efficient reconciliation:
- 4. Responsive personnel;
- 5. Discrete and efficient operation;
- 6. Personal interview; and
- 7. Reference checks.

# IX. GLOSSARY OF TERMS

The Equities Glossary of Terms is referenced in the System's Master Glossary of Terms.